

## **Jefferson County**

## Estimated Economic Contribution of Agriculture, Food, and Food Processing Sectors 6/26/2019

Using the most recent IMPLAN data available (2017) adjusted for 2019, 19 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Jefferson County economy.<sup>1</sup>

These 19 sectors have a total direct output of approximately \$163.8 million and support 1,190 jobs in Jefferson County. Running the model for all 19 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Jefferson County Economy							
Contribution Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>		
Direct Effect	1189.6	17.14%	\$47,918,027	12.29%	\$163,839,945		
Indirect Effect	99.0	1.43%	\$5,703,546	1.46%	\$12,927,298		
Induced Effect	38.7	0.56%	\$2,630,625	0.67%	\$5,005,396		
Total Effect	1327.2	19.12%	\$56,252,198	14.43%	\$181,772,639		

As shown in the above table, agriculture, food, and food processing sectors support 1,327 jobs, or 19.12% of the entire workforce in the county.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 19 agriculture, food, and food processing sectors is approximately \$56.2 million, or 14.43% of the GRP.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting: <a href="https://implanhelp.zendesk.com/hc/en-us/articles/115002801513-Considerations-of-Contribution-Analysis">https://implanhelp.zendesk.com/hc/en-us/articles/115002801513-Considerations-of-Contribution-Analysis</a>

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income.

 $<sup>4\</sup> GRP = final\ demand\ of\ households + governments\ expenditures + capital + exports - imports\ - institutional\ sales.$ 

<sup>5</sup> Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **703 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Jefferson County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment				
Sector	Total Employment	Total Output		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	703.4	\$38,809,762		
Landscape and horticultural services	106.8	\$4,164,012		
Animal, except poultry, slaughtering	81.1	\$56,433,523		
Grain farming	76.6	\$13,753,487		
All other crop farming	51.6	\$1,997,655		
Dairy cattle and milk production	44.5	\$18,374,793		
Oilseed farming	43.8	\$22,969,557		
Veterinary services	30.7	\$2,516,853		
Truck transportation	22.3	\$3,322,414		
Wholesale trade	15.2	\$2,320,993		

The animal, except poultry, slaughtering sector directly contributes approximately \$56.4 million to the Jefferson County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output				
Sector	Total Employment	Total Output		
Animal, except poultry, slaughtering	81.1	\$56,433,523		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	703.4	\$38,809,762		
Oilseed farming	43.8	\$22,969,557		
Dairy cattle and milk production	44.5	\$18,374,793		
Grain farming	76.6	\$13,753,487		
Landscape and horticultural services	106.8	\$4,164,012		
Truck transportation	22.3	\$3,322,414		
Veterinary services	30.7	\$2,516,853		
Wholesale trade	15.2	\$2,320,993		
All other crop farming	51.6	\$1,997,655		

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Jefferson County economy.

All Agriculture, Food, and Food Processing Sectors				
Sector	Total Employment	Total Output		
Oilseed farming	43.8	\$22,969,556.81		
Grain farming	76.6	\$13,753,486.63		
Vegetable and melon farming	1.3	\$282,546.67		
Fruit farming	10.2	\$1,052,659.39		
Tree nut farming	0.5	\$69,572.99		
Greenhouse, nursery, and floriculture production	3.6	\$691,826.70		
All other crop farming	51.6	\$1,997,655.03		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	703.4	\$38,809,761.05		
Dairy cattle and milk production	44.5	\$18,374,792.10		
Poultry and egg production	0.7	\$506,570.04		
Animal production, except cattle and poultry and eggs	12.0	\$775,395.93		
Commercial logging	1.9	\$50,026.45		
Commercial hunting and trapping	1.8	\$35,866.29		
Support activities for agriculture and forestry	11.3	\$499,559.82		
Animal, except poultry, slaughtering	81.1	\$56,433,525.09		
Bread and bakery product, except frozen, manufacturing	7.3	\$791,982.47		
Frozen cakes and other pastries manufacturing	0.4	\$64,296.69		
Veterinary services	30.7	\$2,516,853.33		
Landscape and horticultural services	106.8	\$4,164,012.43		

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Jefferson County, the retail sector was omitted.